

Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon Governor

Lori F. Kaplan Commissioner

September 6, 2002

100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.state.in.us/idem

Mr. Joe Kamil Kimball Industrial Complex 15th Street Source 1037 East 15 Street Jasper, Indiana 47549

Re: Minor Source Modification to a Title V Not Yet

No: 037-16253-00100

Dear Mr. Kamil:

Kimball Industrial Complex applied for a Part 70 operating permit on December 4, 1996 for a furniture and electronics manufacturing source. An application to modify the source was received on July 29, 2002. Pursuant to 326 IAC 2-7-10.5 the following emission units located in Artec Manufacturing which is part of Kimball Industrial Complex, are approved for modification at the source:

Five (5) spray coating booths (identified as SB12R, SB14R, SB17R, SB20R, and SB21R), constructed before 1980 and modified in 2002, applying coatings to both wood furniture and metal/fiberglass doors, with a maximum process rate of 5 metal or fiberglass doors per hour, and using dry filters for overspray control.

The proposed Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(I)(3). The source may begin operation upon issuance of the source modification approval.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original Signed by Paul Dubenetzky Paul Dubenetzky, Chief Permits Branch Office of Air Quality

ERG/YC

cc: File - Dubois County
U.S. EPA, Region V
Dubois County Health Department
Southwest Regional Office
Air Compliance Section Inspector - Gene Kelso
Compliance Data Section - Karen Nowak
Administrative and Development - Sara Cloe
Technical Support and Modeling - Michele Boner
Office of Air Enforcement - Brian Eaton
TV Reviewer - Melissa Groch



Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon Governor

Lori F. Kaplan Commissioner

100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.state.in.us/idem

PART 70 MINOR SOURCE MODIFICATION OFFICE OF AIR QUALITY

Kimball Industrial Complex 1037 East 15th Street Jasper, Indiana 47549

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 037-16253-00100	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: September 6, 2002

TABLE OF CONTENTS

A.1 A.2 A.3	SOURCE SUMMARY General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)] Part 70 Permit Applicability [326 IAC 2-7-2]
SECTION B	GENERAL CONSTRUCTION CONDITIONS
B.1	Definitions [326 IAC 2-7-1]
B.2	Effective Date of the Permit [IC13-15-5-3]
B.3	Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]
SECTION C	GENERAL OPERATION CONDITIONS
C.1	Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
C.2	Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]
C.3	Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
C.4	Opacity [326 IAC 5-1]
C.5	Fugitive Dust Emission [326 IAC 6-1-11.1]
C.6	Operation of Equipment [326 IAC 2-7-6(6)]

Compliance Requirements [326 IAC 2-1.1-11)]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.9 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.10 Compliance Reponse Plan Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
- C.11 Emergency Provisions [326 IAC 2-7-16]
- C.12 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]
- C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

SECTION D.1 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 Minor Source Modification Limit [2-7-10.5 (d)]
- D.1.2 Volatile Organic Compounds [326 IAC 8-2-9]
- D.1.3 Particulate Matter (PM) [40 CFR 52, Subpart P]
- D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.5 VOC Emissions
- D.1.6 VOC Emissions
- D.1.7 Particulate [326 IAC 6-3-2 (d)]

Kimball Industrial Complex

Jasper, Indiana

Permit Reviewer: ERG/YC

Page 3 of 15

MSM 037-16253-00100

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] D.1.8 Monitoring

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

Part 70 Source Modification Certification

Page 4 of 15 MSM 037-16253-00100

Kimball Industrial Complex Jasper, Indiana Permit Reviewer: ERG/YC

SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a wood furniture manufacturing plant with miscellaneous coating operations.

Responsible Official: General Manager

Source Address: 1037 East 15th Street, Jasper, Indiana 47549
Mailing Address: 1037 East 15th Street, Jasper, Indiana 47549

SIC Code: 2541, 2542, 3479

County Location: Dubois

Source Location Status: Attainment for all other criteria pollutants

Source Status: Part 70 Permit Program

Major Source, under PSD Major Source, Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to modify and operate the following emission units and pollution control devices:

Five (5) spray coating booths (identified as SB12R, SB14R, SB17R, SB20R, and SB21R), constructed before 1980 and modified in 2002, applying coatings to both wood furniture and metal/fiberglass doors, with a maximum process rate of 5 metal or fiberglass doors per hour, and using dry filters for overspray control.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

Page 5 of 15 MSM 037-16253-00100

Kimball Industrial Complex Jasper, Indiana Permit Reviewer: ERG/YC

SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

Page 6 of 15 MSM 037-16253-00100

Kimball Industrial Complex Jasper, Indiana Permit Reviewer: ERG/YC

SECTION C

GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a

Kimball Industrial Complex Page 7 of 15
Jasper, Indiana MSM 037-16253-00100

Permit Reviewer: ERG/YC

reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary

Page 8 of 15 MSM 037-16253-00100

Kimball Industrial Complex Jasper, Indiana Permit Reviewer: ERG/YC

equipment and initiating any required monitoring related to that equipment.

C.9 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

- C.10 Compliance Response Plan Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
 - (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (1) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (2) Failure to take reasonable response steps shall constitute a violation of the permit.
 - (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters

Kimball Industrial Complex Jasper, Indiana Permit Reviewer: ERG/YC

established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

- (3) An automatic measurement was taken when the process was not operating.
- (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered:

IDEM, OAQ

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance

Section) or,

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

Southwest Regional Office

Telephone No.: 1-888-672-8323, or Telephone No. 812-436-2570

Facsimile No.: 812-436-2572

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- C.12 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this
 permit, the Permittee shall take appropriate response actions. The Permittee shall
 submit a description of these response actions to IDEM, OAQ, within thirty (30) days of
 receipt of the test results. The Permittee shall take appropriate action to minimize
 excess emissions from the affected facility while the response actions are being
 implemented.

Page 11 of 15 MSM 037-16253-00100

Kimball Industrial Complex Jasper, Indiana Permit Reviewer: ERG/YC

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Kimball Industrial Complex Jasper, Indiana Permit Reviewer: ERG/YC

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Five (5) spray coating booths (identified as SB12R, SB14R, SB17R, SB20R, and SB21R), constructed before 1980 and modified in 2002, applying coatings to both wood furniture and metal/fiberglass doors, with a maximum process rate of 5 metal or fiberglass doors per hour, and using dry filters for overspray control.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds [326 IAC 2-2] [326 IAC 2-7.10.5]

The total potential to emit VOC from these five (5) spray booths (SB12R, SB14R, SB17R, SB20R, and SB21R) is less than twenty-five (25) tons per year when applying the coatings to metal/fiberglass doors. Therefore, the requirements of 326 IAC 2-7.10.5 (f) (Part 70 Significant Source Modification) are not applicable. Any change or modification which may increase the total potential VOC emissions from the spray booths SB12R, SB14R, SB17R, SB20R, and SB21R to greater than twenty-five (25) tons per year must be approved by the Office of Air Quality before any such change may occur.

D.1.2 Volatile Organic Compounds [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating applied in each of the spray booths SB12R, SB14R, SB17R, SB20R, and SB21R shall not exceed three and five tenths (3.5) pounds of VOCs per gallon of coating, excluding water, as delivered to the applicator for any calender day, for application of extreme performance coatings.
- (b) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.1.3 Particulate Matter (PM) [40 CFR 52, Subpart P]

Pursuant to 40 CFR 52, Subpart P, the PM from each of the spray coating booths SB12R, SB14R, SB 17R, SB20R and SB21R shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where $E =$ rate of emission in pounds per hour; and $P =$ process weight rate in tons per hour

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Page 13 of 15 MSM 037-16253-00100

Kimball Industrial Complex Jasper, Indiana Permit Reviewer: ERG/YC

Compliance Determination Requirements

D.1.5 VOC Emissions

Compliance with Conditions D.1.1 shall be demonstrated within 30 days of the end of each month

based on the total VOC usage for the most recent twelve (12) month period.

D.1.6 VOC Emissions

Compliance with the VOC usage limitation contained in Condition D.1.1 and the VOC content limit contained in Condition D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.7 Particulate [326 IAC 6-3-2 (d)]

Pursuant to 326 IAC 6-3-2(d) and in order to comply with D.1.3, the dry filters for particulate control shall be in operation in accordance with manufacturer's specifications and control emissions from the spray coating booths SB12R, SB14R, SB17R, SB20R and SB21R at all times when these five spray booths are in operation. This requirement to operate the control is not federally enforceable.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.8 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the stacks of the spray coating booths SB12R, SB14R, SB17R, SB20R, and SB21R while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Preparation, Implementation, Records, and Reports in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.1.1 and the VOC content limit in Condition D.1.2.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data

sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

- (2) The total VOC usage for each month; and
- (3) The weight of VOC usage for each compliance period.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

Page 15 of 15 MSM 037-16253-00100

Kimball Industrial Complex Jasper, Indiana Permit Reviewer: ERG/YC

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Kimball Industrial Complex

Source Address: 1037 East 15th Street, Jasper, Indiana 47549 Mailing Address: 1037 East 15th Street, Jasper, Indiana 47549

Source Modification No.: 037-16253-00100

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.
Please check what document is being certified:
9 Test Result (specify)
9 Report (specify)
9 Notification (specify)
9 Other (specify)
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Date:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Source Modification

Source Background and Description

Source Name: Kimball Industrial Complex

Source Location: 1037 East 15th Street, Jasper, Indiana 47549

County: Dubois

SIC Code: 2541, 2542, 3479
Operation Permit No.: T037-7356-00100
Operation Permit Issuance Date: Not yet issued
Minor Source Modification No.: 037-16253-00100

Permit Reviewer: ERG/YC

The Office of Air Quality (OAQ) has reviewed a modification application from Kimball Industrial Complex relating to the following:

Five (5) spray coating booths (identified as SB12R, SB14R, SB17R, SB20R, and SB21R), constructed before 1980 and modified in 2002, applying coatings to both wood furniture and metal/fiberglass doors, with a maximum process rate of 5 metal or fiberglass doors per hour, and using dry filters for overspray control.

History

On July 29, 2002, Artec Manufacturing (Plant ID # 073-00046), which is part of Kimball Industrial Complex (Plant ID # 073-00100) submitted an application to IDEM, OAQ requesting the flexibility to perform surface coating operations on both wood furniture and metal/figerglass doors for five (5) existing spray booths SB12R, SB14R, SB17R, SB20R, and SB21R, located in Artec Manufacturing. These five (5) spray booths were permitted for wood surface coating operations only, in permit #19-10-90-0298 and #19-10-90-0299, issued November 26,1986. Kimball Industrial Complex submitted an application for a Part 70 permit on December 4, 1996. However, the Part 70 permit has not been issued yet.

Currently, Artec Manufacturing operates thirty-four (34) wood coating booths and two (2) metal coating booths. The total VOC emissions from Artec Manufacturing were limited to less than 20.1 tons per month (equals 246 tons/yr) in the amendment to OP #19-10-90-0298 and OP #19-10-90-0298, issued October 22, 1987. Artec Manufacturing does not request to relax this VOC limit after this modification.

The proposed change for these five (5) spray booths (SB12R, SB14R, SB17R, SB20R, and SB21R) will not involve any physical change, but is considered a change of operation method. The modification for these five (5) coating booths will not result in debottlenecking or increased utilization of other existing units.

Source Definition

The source definition will be reviewed in the Title V permit # 037-7356-00100.

Enforcement Issues

There are no enforcement actions pending on the five (5) spray coating booths being modified.

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 29, 2002. Additional information was received on August 7, 2002.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (page 1 through 2).

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	10.21
PM-10	10.21
SO ₂	
VOC	17.61
СО	
NO _x	

HAP's	Potential To Emit (tons/year)
Glycol Ethers	2.15
TOTAL	2.15

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5 (d)(4) as the potential to emit of any regulated pollutant is less than 25 tons per year.

County Attainment Status

The source is located in Dubois County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
СО	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Dubois County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Dubois County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
 Since this type of operation is not one of the 28 listed source categories under 326 IAC
 2-2 and since there are no applicable New Source Performance Standards that were in
 effect on August 7, 1980, the fugitive PM emissions are not counted toward
 determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	26
PM-10	26
SO ₂	1
VOC	414
CO	94
NO _x	13

- (a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon actual emissions in 2000 from the emission inventory of IDEM, and are the total emissions from the Kimball Industrial Complex (Plant ID # 073-00100), which includes Artec Manufacturing (Plant ID # 073-00046).

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission

units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)									
Process/facility	PM	PM PM-10 SO ₂ VOC* CO NO _X HAPs								
Five (5) spray booths for metal/fiberglass coating	Less than 2.04	Less than 2.04	-	17.6	-	-	2.15			
Total emissions of the modification	Less than 2.04	Less than 2.04	-	17.6	-	-	2.15			
PSD Thresholds	25	15	40	40	100	40	NA			

*Note: Artec Manufacturing, including the modified booths, is still limited to 20.1 tons of VOC per month (246 tons/yr). This limit is not being changed as part of this permit.

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CRF 52.21, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) These five spray booths (SB12R, SB14R, SB17R, SB20R, and SB21R) perform surface coating operations on metal doors and do not coat metal furniture. Therefore, the New Source Performance Standards for Surface Coating of Metal Furniture (40 CFR Part 60.310 60.316, Subpart EE) are not applicable.
- (c) The source does not perform metal coil surface coating operations. Therefore, the New Source Performance Standards for Metal Coil Surface Coating (40 CFR Part 60.460 60.466, Subpart TT) are not applicable.
- (d) These five spray booths do not apply the surface coating to any business machines. Therefore, the New Source Performance Standards for Surface Coating of Plastic Parts for Business Machines (40 CFR Part 60.720 60.726, Subpart TTT) are not applicable.
- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.
- (f) This source is a wood furniture manufacturing plant. These five (5) spray booths apply coatings to both wood furniture and metal/fiberglass doors. The wood coating operations of these five (5) existing spray booths were permitted in OP #19-10-90-0298 and OP #19-10-90-0299, issued November 26, 1986. Therefore, this modification is only related to the surface coating operations applied to metal/fiberglass doors, and the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Wood Furniture Manufacturing Operations (40 CFR 63.800 63.819, Subpart JJ) are not addressed here. The requirements of 40 CFR 63, Subpart JJ for the entire source will be included in source's Title V permit.

Page 5 of 7 MSM 037-16253-00100

Kimball Industrial Complex Jasper, Indiana Permit Reviewer: ERG/YC

State Rule Applicability - Five (5) Spray Coating Booths

326 IAC 2-7-10.5 (d) (Minor Source Modification to a Part 70 Source)

The total potential to emit VOC from these five (5) spray booths (SB12R, SB14R, SB17R, SB20R, and SB21R) is less than twenty-five (25) tons per year when applying the coatings to metal/fiberglass doors. Therefore, the requirements of 326 IAC 2-7.10.5 (f) (Part 70 Significant Source Modification) are not applicable. Any change or modification which may increase the total potential VOC emissions from these five spray booths (SB12R, SB14R, SB17R, SB20R, and SB21R) to greater than twenty-five (25) tons per year must be approved by the Office of Air Quality before any such change may occur.

326 IAC 326 IAC 2-2 (PSD)

Kimball Industrial Complex is a PSD major source and the potential to emit of this modification is less than the PSD significant thresholds. Therefore, the requirements of 326 IAC 2-2 are not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The source was constructed before July 27, 1997. Therefore, the requirements of 326 IAC 2-4.1 are not applicable to these five (5) booths. However, since the source is a wood furniture manufacturing plant and is a HAP major source, the NESHAP for Wood Furniture Manufacturing Operations (40 CFR 63, subpart JJ) applies and will be included in the source's Title V permit.

326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)

These five (5) spray booths (SB12R, SB14R, SB17R, SB20R, and SB21R) perform surface coating operations on metal doors, and the source is under the Standard Industrial Classification Code of major group #34. Therefore, these spray booths are subject to 326 IAC 8-2-9 and shall meet the following requirements:

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the VOC content of coating applied in each of the spray booths SB12R, SB14R, SB17R, SB20R, and SB21R shall not exceed 3.5 pounds of VOCs per gallon of coating, excluding water, as delivered to the applicator for application of extreme performance coatings.
- (b) Solvent sprayed from the application equipment during clean-up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is completed, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the Permittee, the VOC content of each coating delivered to these five (5) spray booths SB12R, SB14R, SB17R, SB20R, and SB21R is in compliance with the requirements above.

326 IAC 6-3-2 (Process Operations)

On June 12, 2002, revisions to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) became effective; this rule was previously refered to as 326 IAC 6-3 (Process Operations). As of the date this permit is being issued, these revisions have not been approved by EPA into the Indiana State Implementation Plan (SIP); therefore, the following requirement from the previous version of 326 IAC 6-3 (Process Operations) which has been approved into the SIP will remain applicable requirement until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action.

Pursuant to 40 CFR 52, Subpart P, the particulate matter (PM) from each of the spray coating booths SB12R, SB14R, SB17R, SB20R and SB21R shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

Kimball Industrial Complex Page 6 of 7
Jasper, Indiana MSM 037-16253-00100

Permit Reviewer: ERG/YC

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Under the rule revision, particulate from these five spray coating booths (SB12R, SB14R, SB17R, SB20R and SB21R) shall be controlled by dry filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

326 IAC 5-1 (Opacity Limitations)

This source is located in Dubois County. Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity of these five (5) spray booths shall meet the following requirements:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- 1. The five (5) spray coating booths (SB12R, SB14R, SB17R, SB20R, and SB21R) have applicable compliance monitoring conditions as specified below:
 - (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the spray coating booth stacks while one or more of the booths are in operation.
 - (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed.

Kimball Industrial Complex Jasper, Indiana Permit Reviewer: ERG/YC

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the dry filers must function properly to ensure compliance with 40 CFR 52, Subpart P.

Conclusion

The operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 037-16253-00100.

Appendix A: Emission Calculations VOC and PM/PM10 Emissions From the Five (5) Spray Booths

Company Name: Kimball Industrial Complex

Address City IN Zip: 1037 East 15th Street, Jasper, IN 47549

MSM: 037-16253-00100

Reviewer: ERG/YC

Date: August 23, 2002

Spray Booth ID	Coatings	Density (Lb/Gal)	Weight % Volatile (H ₂ O & Organics)	Maximum Throughput (unit/hr)	Maximum Usage (gal/unit)	**Pounds VOC per gallon of coating	Potential VOC (lbs/hr)	Potential VOC (lbs/day)	Potential VOC (tons/yr)	*PM/PM10 Potential (lb/hr)	*PM/PM10 Potential (ton/yr)	Transfer Efficiency	PM/PM10 Control Efficiency	Potential to Emit PM/PM10 (lb/hr)	Potential to Emit PM/PM10 (tons/yr)
SB12R	Shad Stain 26-7028	6.61	99.58%	5.0	0.016	3.42	0.27	6.41	1.17	0.00	0.00	65%	80%	0.00	0.00
SB14R	Wipe Stain 52-0782	8.43	93.66%	5.0	0.031	3.47	0.54	13.01	2.37	0.03	0.13	65%	80%	0.01	0.03
ST17R	Clear Coat 52-0783	8.68	65.36%	5.0	0.133	1.66	1.10	26.46	4.83	0.70	3.06	65%	80%	0.14	0.61
SB20R	Base Coat 52-0781	9.77	62.43%	5.0	0.141	1.43	1.01	24.13	4.40	0.90	3.96	65%	80%	0.18	0.79
SB21R	Clear Coat 52-0783	8.68	65.36%	5.0	0.133	1.66	1.10	26.46	4.83	0.70	3.06	65%	80%	0.14	0.61
Total							4.02		17.61	2.33	10.21			0.47	2.04

^{*} Assume all the PM emissions are PM10 emissions.

METHODOLOGY

Potential VOC (lbs/hr) = Pounds of VOC per Gallon coating (lb/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit)

Potential VOC (lbs/day) = Pounds of VOC per Gallon coating (lb/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit) * (24 hr/day)

Potential VOC (tons/yr) = Pounds of VOC per Gallon coating (lb/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit) * (8760 hr/yr) * (1 ton/2000 lbs)

Potential PM/PM10 (lbs/hr) = Max. Throughput (unit/hr) * Max. Usage (gal/unit) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer Efficiency)

Potential PM/PM10 (tons/yr) = Max. Throughput (unit/hr) * Max. Usage (gal/unit) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer Efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)

Potential to Emit PM/PM10 (lbs/hr) = Potential PM/PM10 (lbs/hr) * (1 - PM/PM10 Control Efficiency)

Potential to Emit PM/PM10 (tons/yr) = Potential PM/PM10 (lbs/hr) * (1 - PM/PM10 Control Efficiency) * (8760 hr/yr) x (1 ton/2000 lbs)

^{**} The VOC content information for each coating is from the Certified Production Data Sheet provided by the source.

Appendix A: Emission Calculations HAP Emissions From the Five (5) Spray Booths

Company Name: Kimball Industrial Complex

Address City IN Zip: 1037 East 15th Street, Jasper, IN 47549

MSM: 037-16253-00100

Reviewer: ERG/YC

Date: August 23, 2002

Spray Booth ID	Coatings	Density (Lb/Gal)	Maximum Throughput (unit/hr)	Maximum Usage (gal/unit)	Weight % Glycol Ethers	Glycol Ethers Emissions (tons/yr)
SB12R	Shad Stain 26-7028	6.61	5.0	0.016	0.00%	0.00
SB14R	Wipe Stain 52-0782	8.43	5.0	0.031	0.50%	0.03
ST17R	Clear Coat 52-0783	8.68	5.0	0.133	2.71%	0.68
SB20R	Base Coat 52-0781	9.77	5.0	0.141	2.50%	0.75
SB21R	Clear Coat 52-0783	8.68	5.0	0.133	2.71%	0.68
Total						2.15

Total HAPs 2.15 tons/yr

METHODOLOGY

HAPs emission rate (tons/yr) = Density (lb/gal) x Max. Throughput (unit/hr) * Max. Usage (gal/unit) x Weight % HAP x 8760 hr/yr x 1 ton/2000 lbs